



Maryland Oyster Overview

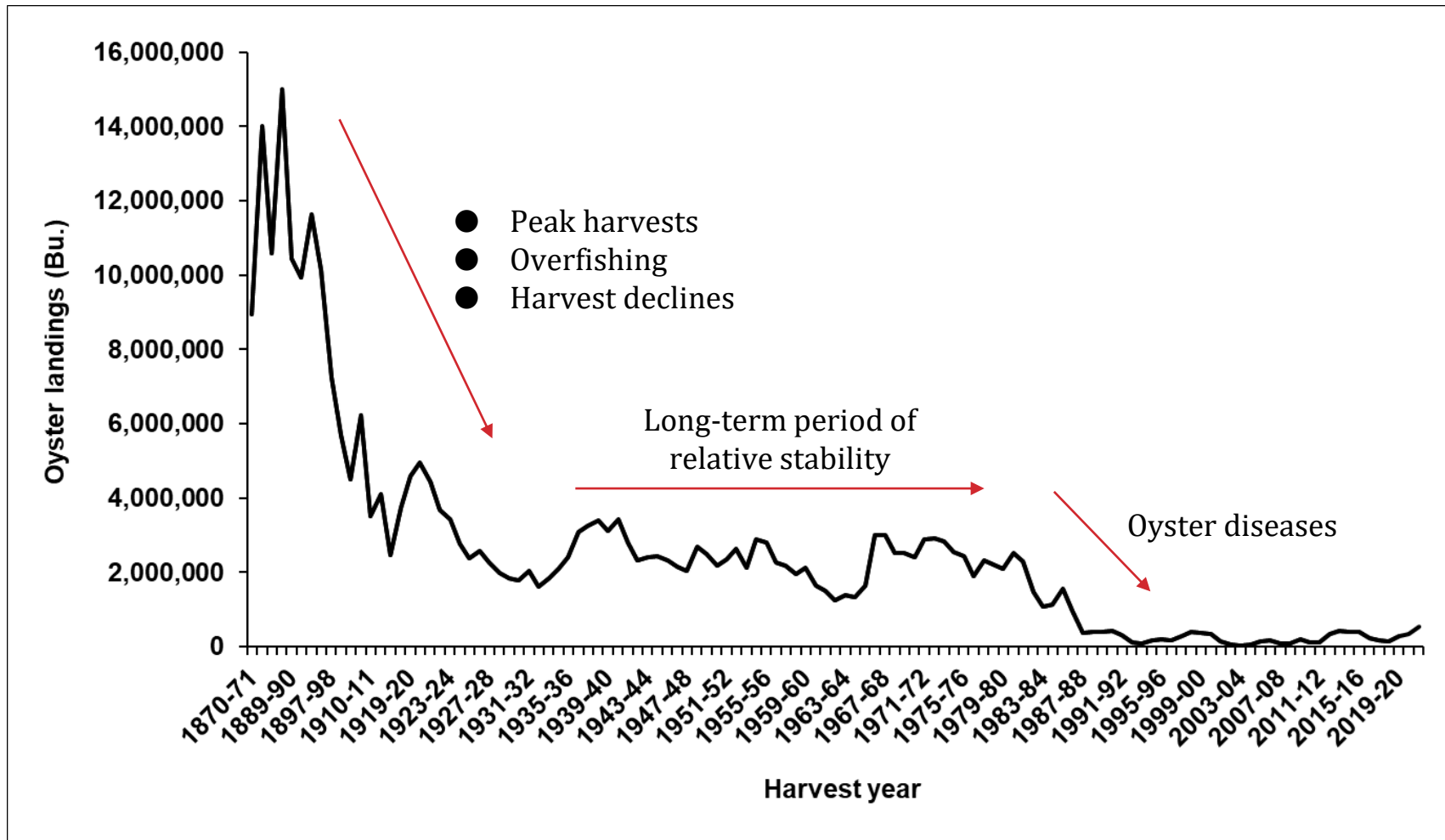
Environment & Transportation Committee
January 31, 2023

- Status of the Resource
- Oyster Management Areas
 - Public Fishery
 - Sanctuaries
 - Aquaculture
- Looking Forward
 - Oyster Advisory Commission
 - 2022 MGA's HB1228/SB0830
 - Bay Bottom Survey
 - Eastern Bay Project
 - Oysters as BMPs

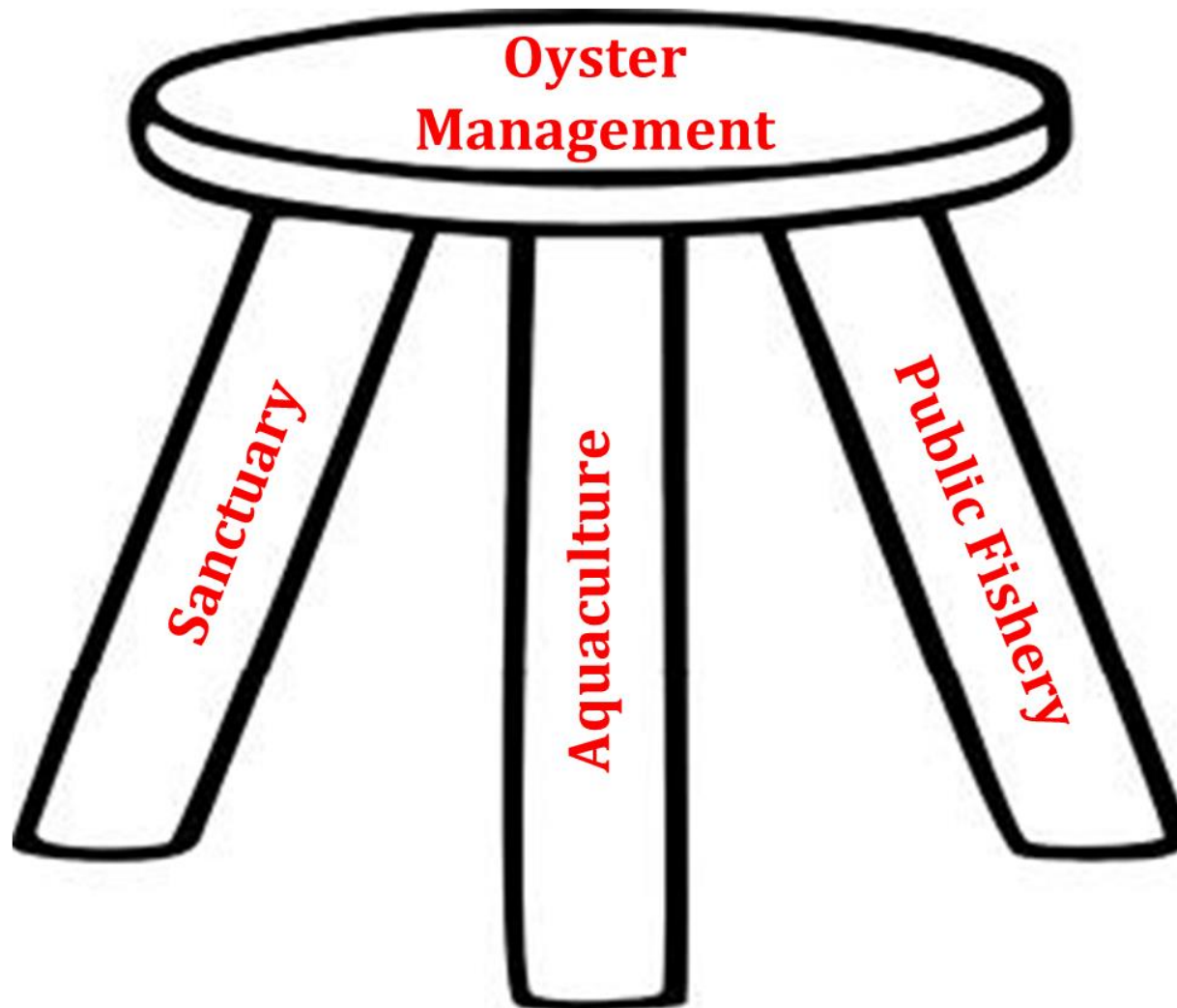


Status of the Resource

Commercial Public Fishery Oyster Harvest



Three Management Areas



Public Fishery

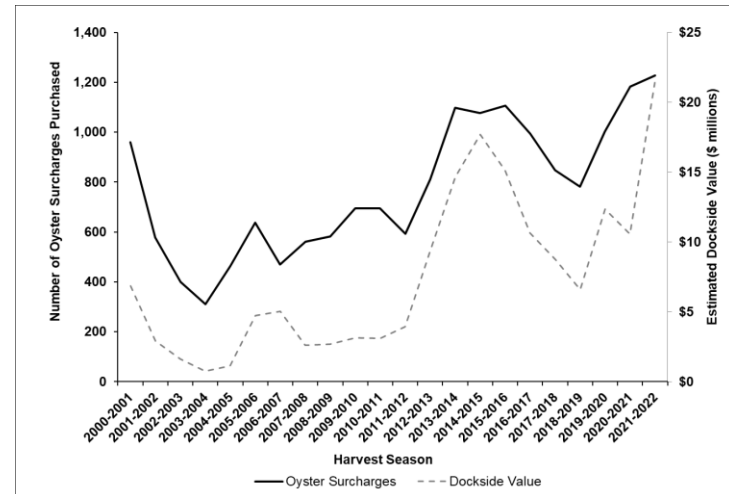
Public Commercial Fishery Management

Harvest managed by:

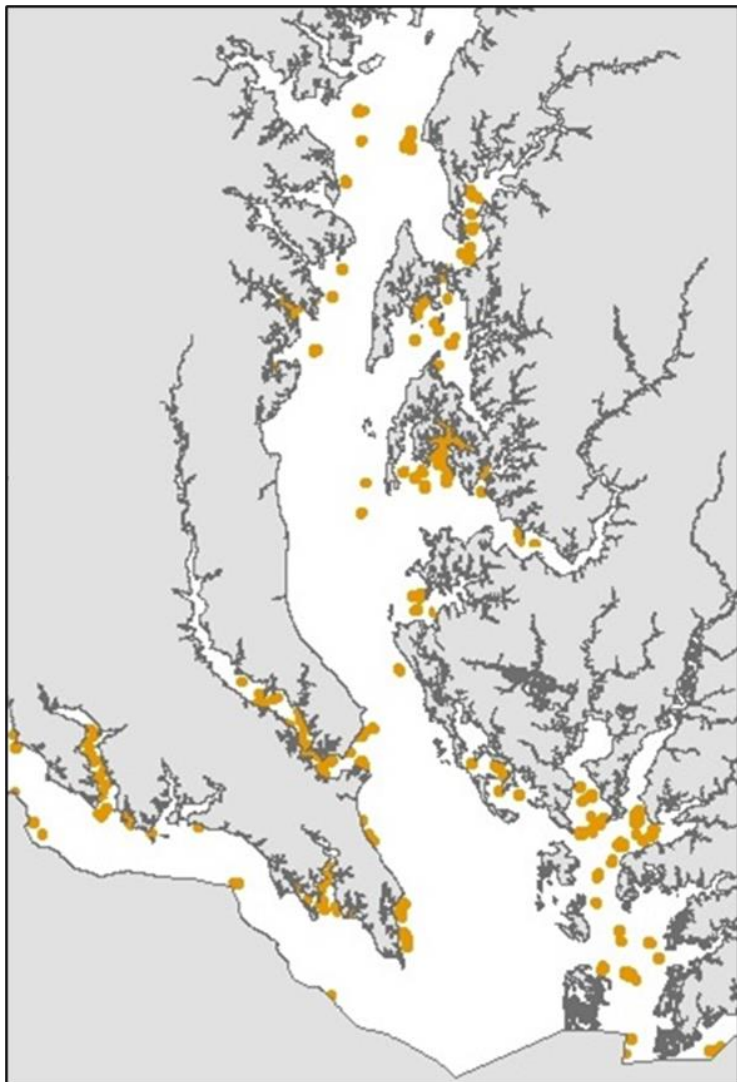
- Season and # days/week limits
- Bushel limits per gear type
- Open/Close areas
- Limits set annually based on stock assessment and monitoring data

Maximum of 2,828 commercial licenses able to harvest

- Between 800 to 1,300 oyster surcharges annually in last 10 years



Public Fishery



Habitat and population replenishment on public fishery bottom

Over 1,000 oyster bars

- 248,476 acres not in a sanctuary
- 76% of historic bar acreage

Total planted since 2010 (orange areas on map)

- >1.5M bushels of fresh shell
- >160k bushels of natural seed
- >2.3B hatchery spat

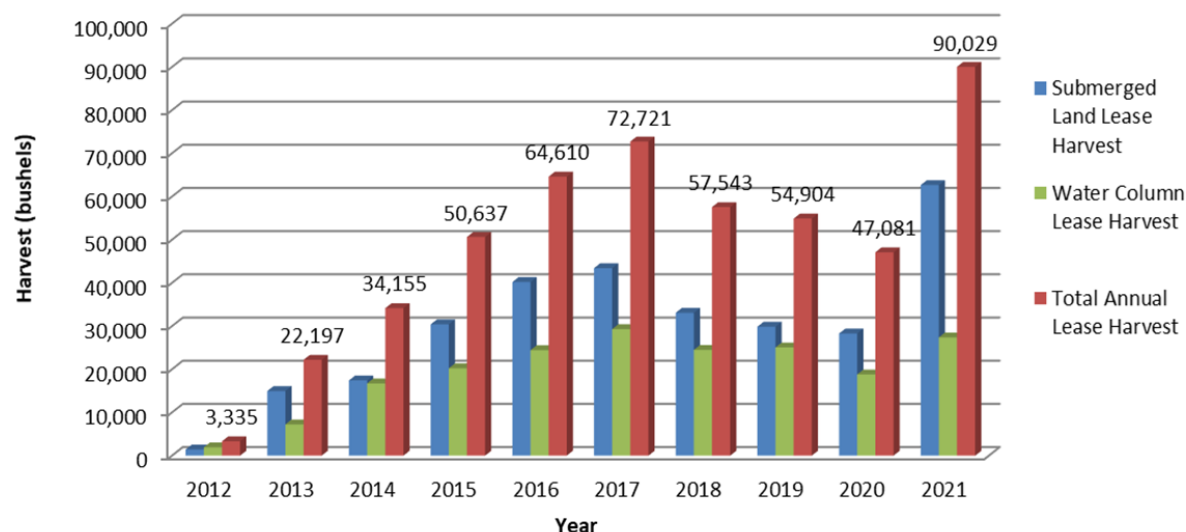
Funding: bushel tax, oyster export tax, oyster surcharge revenue, and grant from MDOT

Acres = historic oyster bottom charted in the Yates Survey from 1906 to 1912 plus its amendments.

Shellfish Aquaculture

Farm-raised oyster harvest decreased during 2018-19 freshets & 2020 pandemic but now is rebounding

**Annual Farm-Raised Oyster Harvest in Maryland
2012*-2021**



*2012 was a partial reporting year

Estimated dockside value for farm-raised oyster harvest in 2021 was > \$6.2 million

2022 farm-raised oyster harvest is expected to exceed 92,000 bushels.

DNR has received an average of 40 new lease applications per year from 2010 to 2022.

- 478 shellfish leases on 7,683 acres (375 submerged land, 103 water column)
- 480 discrete individuals issued harvester cards in 2022 for lease activities
- 40-45% of leaseholders also hold a Tidal Fish License

Sanctuaries

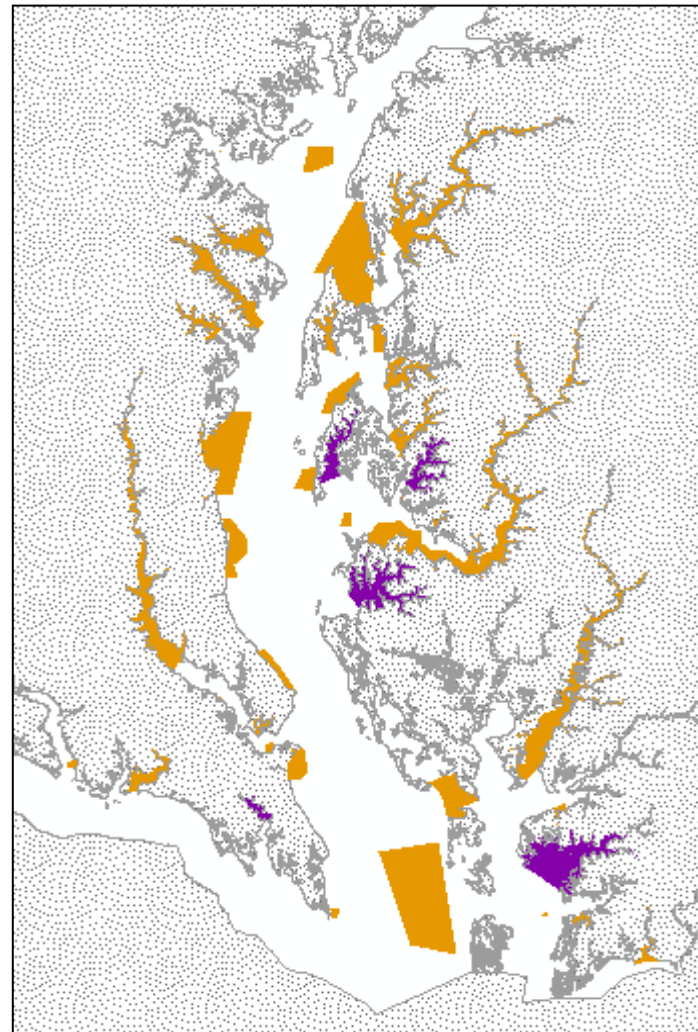
51 sanctuaries since 2010

- 78,961 acres of sanctuaries
- 24% of historic bar acreage

Ongoing habitat and population enhancement

- Large-scale restoration in 5 sanctuaries (purple areas)
- Small-scale restoration in some of the other 46 sanctuaries (orange areas)

Acres = historic oyster bottom charted in the Yates Survey from 1906 to 1912 plus its amendments.



Restoration in Sanctuaries

Large-scale Restoration in the Five Tributaries by 2025 is On Schedule

Harris Creek: **Tributary is restored**

- 348 acres initially restored; 2.49 billion spat planted
- 334 acres met restoration metrics

Little Choptank: Initial restoration is complete

- 358 acres initially restored; 1.85 billion spat planted
- Monitoring and planned second seeding is ongoing

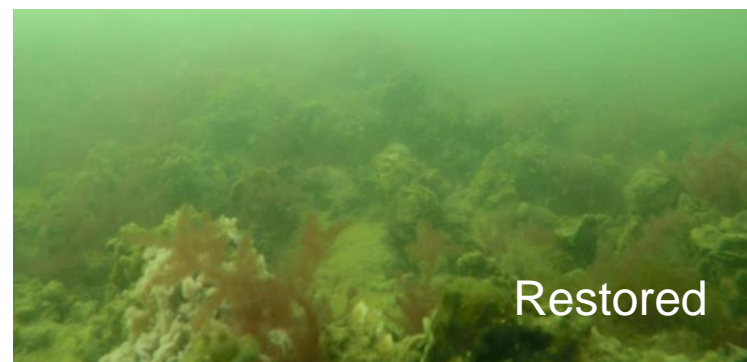
Tred Avon: Initial restoration is complete

- 130 acres initially restored; 1.06 billion spat planted
- Monitoring and planned second seeding is ongoing

Upper St Mary's: Initial restoration is complete

- 60 acres initially restored; 152 million spat planted
- Monitoring and planned second seeding is ongoing

Manokin: Restoration began in 2021



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OAC

Oyster Advisory Commission (OAC)

- Provides recommendations to DNR on oyster management
- 26 voting members; 60% industry related



2021 Package of Consensus Recommendations

- Incorporate the OAC's package of consensus recommendations into the 2019 Oyster Management Plan
 - 19 recommendations
- Department incorporates an amendment to the existing plan into regulation via reference in 2023

HB1228/SB0830

2022 Maryland General Assembly Session: Senate Bill 830
crossfiled with House Bill 1228

Written in support of the 2021 OAC's package of consensus
recommendations

Has **7** main topics

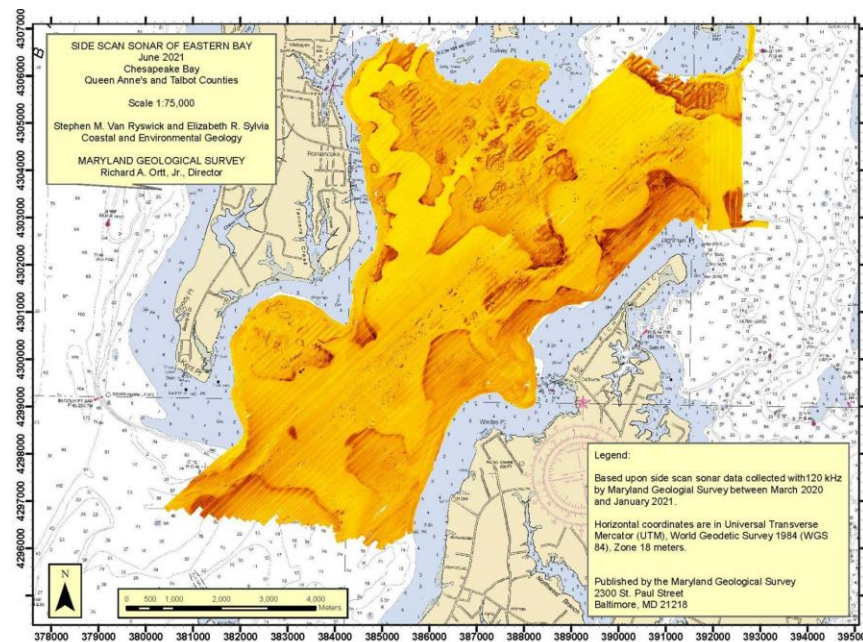
- In-state oyster shucking houses
- Shell recycling
- Bay bottom survey
- Study on substrates
- Report on substrate needs
- Increasing larvae production
- Eastern Bay project



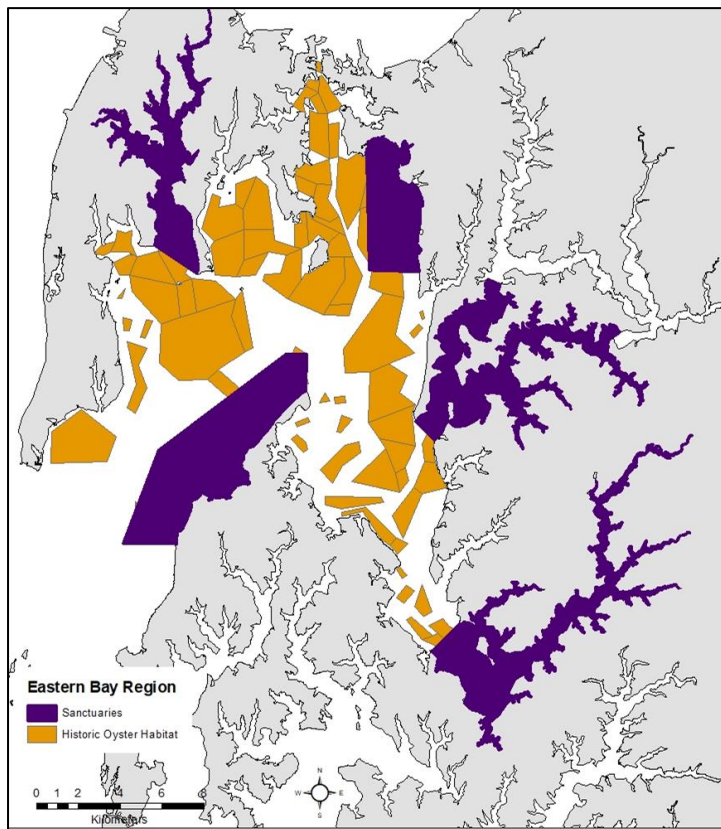
Bay Bottom Survey

New Bay Bottom Survey

- Last completed in the 1970-80's
- Sonar survey to classify the bay bottom into mud, sand, shell, and other habitats
- Will be used to identify current oyster habitat
- Re-delineate oyster bar boundaries
 - Currently using 1906-1912 oyster bar boundaries
- Used to determine placement of restoration and replenishment plantings



Eastern Bay Project



Combination of replenishment, restoration and aquaculture activities should be collectively planned and undertaken in Eastern Bay

- Mixed-use project
- Spat planting in sanctuaries
- Spat and shell planting on fishery bars
- Over 25 years
- Effectiveness evaluated every 5 years

Recommended by Oyster Advisory Commission consensus project

****Started restoration planting in 2022**

Oysters as BMPs

Oysters can be used as Best Management Practices to remove nitrogen and phosphorus.

- Approved in aquaculture practices
- Being studied and reviewed to determine if can use in oyster restoration and oyster public fishery

Wicomico River Oyster Co-Op

- Aquaculture lease
- Charles County government purchase credits from co-op

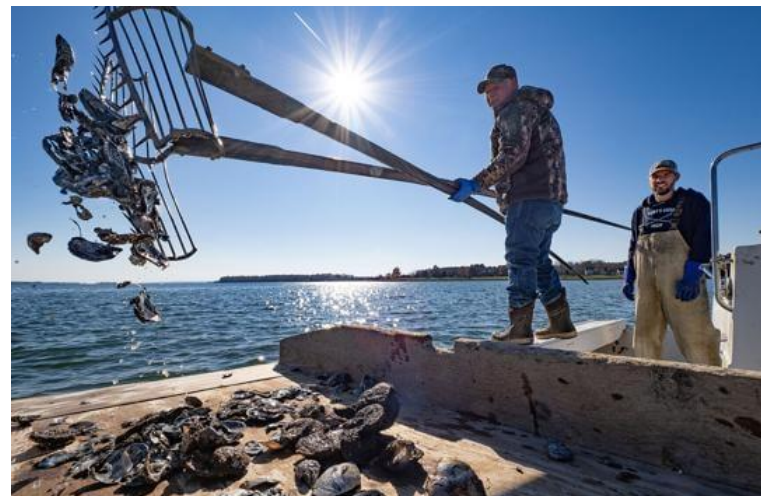


Photo Credit: Dave Harp, Bay Journal

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Questions?

